The Sectoral Solution to Climate Change

Forests

The 1.5ºC goal is impossible without the contribution of nature. Reducing **deforestation and forest degradation** – including peatlands and mangroves – represents one of the most effective mitigation options with the potential to **slash 4 Gt of emissions a year**.

Commitments for forests are nowhere near what is needed to reach the Paris Agreement goals. **Deforestation continues** and the existing model for financing forest protection is not working. There is a **low level of ambition** from key actors, slow implementation, and a complex system with high transaction costs. We need urgent and large-scale action to halt and reverse deforestation.

Furthermore, the power of forests in protecting people from the impacts of climate change is often overlooked – a concept referred to as **ecosystem-based adaptation.** Forests act as climate shock absorbers and provide a wide range of ecosystem services that help communities withstand droughts, floods, heatwaves and landslides.

Key messages

- Governments are making ambitious commitments to protect the world's forests enshrined through the **Glasgow Leaders' Declaration on Forests and Land Use, the Forest and Climate Leaders Partnership**, the **partnership between Brazil, Indonesia, and the Democratic Republic of Congo** and the **COP-28 Consensus Agreement** that recognized the need to reverse deforestation by 2030. We are not short of pledges.

- Yet we lose around **10 million hectares of forests annually** –an area larger than Portugal – contributing to **11-13 percent of global GHG emissions**.

- **Finance for forests** is still insufficient to halt and reverse forest loss and degradation. If the world wants to halt nature loss, limit climate change to below 1.5C, and achieve land degradation neutrality by 2030, current **finance flows to Nature-based Solutions must double by 2025 and triple by 2030**.

- Time is running out. If the deforestation of tropical forests, especially Amazonia, were to reach an ecological tipping point, turning it into a savannah, climate and biodiversity goals would become unattainable. The impacts would be severe.

- Forests are an integral climate solution; **reducing Emissions from Deforestation and Forest Degradation (REDD+)** remains a critical element of international climate commitments and national climate strategies.

- Forests can provide up to a third of what is needed to close the emission gap by 2030.

- Forests are more than carbon sinks**—they are home to 80 percent** of terrestrial biodiversity and offer a lifeline to the world's most marginalized communities. Forests are essential to the health of the planet, its people, biodiversity, and water and food security.

- UNEP, through the **Green Gigaton Challenge**, aims to raise funds to transact one gigaton of high-quality CO_2 emissions reductions from forests by 2025, and annually thereafter.

- To meet this target, we need to replicate for forestry the conditions that are enabling decarbonization in the energy sector: the combined effect of incentives through increased **carbon floor price** (USD 30-50 per ton) and predictability of demand. Predictability would come from donor-funded floor prices that act as payers of last resort and by facilitating and leveraging private sector demand for emission reductions above these prices.

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Further Reading

The 2019 IPCC Special Report on Climate Change and Land

The Emission Gap Report 2018

National Mitigation Potential from Natural Climate Solutions in the Tropics

Making Good on the Glasgow Climate Pact

Synthesis Report of the IPCC Sixth Assessment Report

Forestry in the Gambia: A Climate Adaptation Case Study

Spreading like Wildfire: The Rising Threat of Extraordinary Landscape Fires

Briefing Note: Ecosystem-based Adaptation and Forestry

Harnessing Nature to Build Climate Resilience: Scaling Up the Use of Ecosystem-based Adaptation

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- **High-integrity carbon markets** are key to reducing and removing emissions above and beyond what would otherwise be possible and channeling finance toward forest conservation and restoration.
- **Each of us has a role to play**, whether it is by choosing sustainable, deforestation-free products and diets, contributing to native reforestation, or advocating for equitable and sustainable forest protection policies.
- With an anticipated increase in forest fires globally, countries must invest in **fire prevention mechanisms.**
- **Forests provide vital ecosystem services** that protect communities against the extremities of climate change. Tree shade and transpiration provide cooling benefits during heatwaves, and forests' ability to recharge groundwater supplies can be a lifeline in times of drought. The root systems absorb moisture underground to thwart major flooding events.
- For communities that depend directly on forest resources for their livelihoods, **training should be provided** on how to adopt new income-generating livelihood schemes that are both climate resilient and don't cause the degradation of forest ecosystems.

Key data

- There could be a 14 per cent global increase in forest fires by 2030, and 50 per cent by 2100 (UNEP 2022)
- Agricultural expansion is the main driver of deforestation and the loss of forest biodiversity. (FAO, 2020)
- Investments in forests can tackle the climate and biodiversity crises together. A strategic choice of conservation areas with forests at their core can safeguard 500 gigatons of carbon and secure 95 percent of biodiversity benefits. (UNEP-WCMC, 2020)
- Every dollar invested in avoided deforestation and forest degradation over the next 70 years would save between $6 to $7 in global mitigation costs to reduce carbon emissions to net-zero (UN-REDD, 2023)